Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) Method for determining a routing table in a communication network comprising buses connected by bridges, each bridge comprising two companion portals, a first portal being connected to a first bus and a second portal being connected to a second bus, each bus being identified by a unique bus identifier, each portal being identified by a unique portal identifier, said method ~~being characterized in that it comprises~~ comprising the steps of:

(a) transmitting, by a given portal, routing table data stored by said given portal to a companion portal associated with said given portal and receiving, by said given portal, routing table data from the companion portal;

(b) concatenating said routing table data received in step (a) with the contents of the routing table data stored by said given portal;

(c) broadcasting said routing table data stored by said given portal on a local bus associated with the given portal;

(d) receiving routing table data broadcast by other portals on the local bus and concatenating said received routing table data broadcast by other portals with contents of the routing table data stored by said given portal;

(e) repeating the above steps until routing data concerning all buses in the network has been received by said given portal.

2. (Previously Presented) Method according to claim 1, wherein

- the routing table data transmitted by said given portal during the first iteration of the step (a) comprises an identifier of the given portal and an identifier of the given portal's local bus;

- the routing table data received by said given portal from the companion portal during the first iteration of step (a) comprises an identifier of said companion portal and an identifier of the companion portal's local bus.

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3. (Previously Presented) Method according to claim 2, wherein said routing table data transmitted, respectively received, by said given portal comprises the given portal's identifier, respectively the identifier of the given portal's companion portal.

4. (Previously Presented) Method according to claim 2, wherein the routing table of a portal comprises the identifiers of remote buses, and for each remote bus, the identifier of the portal local to the remote bus having initially transmitted the remote bus identifier, the depth of the remote bus compared to the bus local to the given portal, and the identifier of the local portal having broadcast the routing table data comprising the remote bus identifier on the local bus.

5. (Currently Amended) Method according to claim 1, wherein the routing table data transmitted or broadcast by said given portal contains the entire routing table.

6. (Currently Amended) Method according to claim 5, wherein the [[given-portal]] given portal stops iterating the steps (a) to (e) when the routing tables received from the companion portal and local portals contain only data which is redundant with the given portal's own routing table.

7. (Previously Presented) Method according to claim 1, wherein the routing table data transmitted or broadcast by the given portal comprises only a part of the routing table which was not transmitted or broadcast by said given portal during a previous step.

8. (Previously Presented) Method according to claim 7, wherein the given portal stops iterating the steps (a) to (e) when the given portal did not receive routing data during a previous iteration.

9. (Previously Presented) Method according to claim 1, wherein the concatenation steps include selection of a unique path from the bus local to the given portal to any remote bus and deletion of non-selected paths from the routing table of the given portal.

10. (Previously Presented) Method according to claim 9, wherein said selected path to a given remote bus is a function of portal identifiers stored in the routing table for said given remote bus.

11. (Previously Presented) Method according to claim 9, wherein said selected path to a given remote bus is a function of the bandwidth of portals on said selected path.

12. (Previously Presented) Method according to claim 9, wherein said selection is made among the shortest paths to the remote bus, paths of greater length being deleted from the routing table.

13. (Previously Presented) Method according to claim 1, wherein a routing table is simplified for the purpose of routing messages to contain a list of remote bus identifiers and for each remote bus whether the given portal shall forward a message from the bus local to the given portal to its companion portal.

14. (Previously Presented) Portal device adapted to be connected to a first communication bus and adapted to be linked to a companion portal device for connection to a second communication bus, said portal device comprising:
- a bus interface for connection to said first communication bus;
- a switching fabric interface for connection to said companion portal device;
- a memory for storing routing table data;
- means for transmitting routing table data stored in said memory to said companion portal, for broadcasting routing table data stored in said memory

on said first communication bus, for controlling said bus interface and switching fabric interface to receive or transmit routing table data, and for concatenating received routing table data with data stored in said memory during successive receive and transmit cycles relating to routing table data for remote communication buses.